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### **AMENDMENT IN THE DRAWINGS**

Correction to the drawings in Figure 2 has been made to renumber elements "104" to "106" and elements "106" to "104".

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## REMARKS

Reconsideration of the application, in view of the foregoing amendments and the following remarks and arguments, is respectfully requested.

1. Correction to the drawings in Figure 2 has been made to renumber elements "104" to "106" and elements "106" to "104".
2. Claim 45 is canceled and Claims 1 and 41 are amended to remove reference to "treatment" and "precursor material". Claim 1 is amended to remove the "product-by-process" recitation with respect to the filaments in favor of clarity. However, applicant respectfully notes limitations of an apparatus claim may be presented in "product-by-process" format, see MPEP 2173.05(p).
3. The rejection of claims 1, 41-45, 47-48, and 50-53 under 35 USC 103(a) as being unpatentable over Nordin (USPN 5,804,274) in view of <http://www.the-cloth.com/ourmicro.shtml> (herein referred to as "the cloth website") is respectfully traversed and reconsideration thereof is respectfully requested.

With respect to Claims 1, 48 and 51, Nordin does not disclose the use of a yarn comprising fiber [herein filaments] that are split. Nordin does not disclose the use of a yarn comprising fiber [herein filaments] that are split and comprise a core member, a plurality of projections emanating from the core member and a wedge-shaped insert disposed between every other projection. Nordin does not disclose the use of a yarn comprising fiber [herein filaments] that are of a filament that is spun extruded from a precursor material comprising a combination from about 70 percent to about 90 percent polyester and about 10 percent to about 30 percent nylon, acid treated to comprise a core

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member, a plurality of projections emanating from the core member, and a wedge-shaped insert disposed between every other projection.

The reference "the cloth website" does not disclose a mop having at least two cords that are separate and non-interwoven and are each of a plurality of filaments comprising the shown cross section of a split micro fiber (left most picture on page 1). Therefore, it would not have been obvious for one of the ordinary skill in the art to modify the microfiber of Nordin to be a split microfiber, as shown on "the cloth website". It is not permissible to use hindsight under 35 USC 103 to reconstruct elements of the claim. Additionally, websites are transient in nature and are continuously updated and changed, as such it is difficult to determine when information is made available on a particular website.

Further, applicant submits herewith a declaration under 37 CFR 1.131 showing an actual reduction to practice of the apparatus embodied by the claims as recited above before the reference "the cloth website" bearing a print date of 5/6/2003. As such, "the cloth website" is removed as an available reference in making the above 103(a) rejection of claims 1, 41-45, 47-48, and 50-53 over Nordin in view of "the cloth website".

With respect to claims 41-43, 46, and 47, as recited above, each are patentable under 35 USC 103 because they each add additional features to independent claim 1 as amended and recited above, and are thus submitted to be a-fortiori, patentable.

With respect to claims 49 and 50, as recited above, each are patentable under 35 USC 103 because they each add additional features to independent claim 48 as amended and recited above, and are thus submitted to be a-fortiori, patentable.

With respect to claims 52-54, as recited above, each are patentable under 35 USC 103 because they each add additional features to independent claim 51 as amended and recited above, and are thus submitted to be a-fortiori, patentable.

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4. The rejection of claims 1, 41-42, 45 and 51 under 35 USC 103(a) as being unpatentable over EP 1 224 900 in view of <http://www.the-cloth.com/ourmicro.shtml> (herein referred to as "the cloth website") is respectfully traversed and reconsideration thereof is respectfully requested.

With respect to Claims 1 and 51, EP 1 224 900 does not disclose the use of a yarn comprising fiber [herein filaments] that are split. EP 1 224 900 does not disclose the use of a yarn comprising fiber [herein filaments] that are split and comprise a core member, a plurality of projections emanating from the core member and a wedge-shaped insert disposed between every other projection. EP 1 224 900 does not disclose the use of a yarn comprising fiber [herein filaments] that are of a filament that is spun extruded from a precursor material comprising a combination from about 70 percent to about 90 percent polyester and about 10 percent to about 30 percent nylon, acid treated to comprise a core member, a plurality of projections emanating from the core member, and a wedge-shaped insert disposed between every other projection.

The reference "the cloth website" does not disclose a mop having at least two cords that are separate and non-woven and are of a plurality of filaments comprising the shown cross section of a split micro fiber (left most picture on page 1). Therefore, it would not have been obvious for one of the ordinary skill in the art to modify the microfiber of Nordin to be a split microfiber, as shown on "the cloth website". It is not permissible to use hindsight under 35 USC 103 to reconstruct elements of the claim. Additionally, websites are transient in nature and are continuously updated and changed, as such it is difficult to determine when information is made available on a particular website.

Further, applicant submits herewith a declaration under 37 CFR 1.131 showing an actual reduction to practice of the apparatus embodied by the claims as recited above before the reference "the cloth website" bearing a print date of 5/6/2003. As such, "the cloth website" is removed as an available reference in making the above 103(a) rejection of claims 1, 41, 42, 45 and 51 over EP 1 224 900 in view of "the cloth website".

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With respect to claims 41 and 42, as recited above, each are patentable under 35 USC 103 because they each add additional features to independent claim 1 as amended and recited above, and are thus submitted to be a-fortiori, patentable.

5. The rejection of claims 1, 41-45, 48 and 51-52 under 35 USC 103(a) as being unpatentable over EP 1 362 544 in view of <http://www.the-cloth.com/ourmicro.shtml> (herein referred to as "the cloth website") is respectfully traversed and reconsideration thereof is respectfully requested.

With respect to Claims 1, 48 and 51, EP 1 362 544 does not disclose the use of a yarn comprising fiber [herein filaments] that are split. EP 1 362 544 does not disclose the use of a yarn comprising fiber [herein filaments] that are split and comprise a core member, a plurality of projections emanating from the core member and a wedge-shaped insert disposed between every other projection. EP 1 362 544 does not disclose the use of a yarn comprising fiber [herein filaments] that are of a filament that is spun extruded from a precursor material comprising a combination from about 70 percent to about 90 percent polyester and about 10 percent to about 30 percent nylon, acid treated to comprise a core member, a plurality of projections emanating from the core member, and a wedge-shaped insert disposed between every other projection.

The reference "the cloth website" does not disclose a mop having at least two cords that are separate and non-woven and are of a plurality of filaments comprising the shown cross section of a split micro fiber (left most picture on page 1). Therefore, it would not have been obvious for one of the ordinary skill in the art to modify the microfiber of Nordin to be a split microfiber, as shown on "the cloth website". It is not permissible to use hindsight under 35 USC 103 to reconstruct elements of the claim. Additionally, websites are transient in nature and are continuously updated and changed, as such it is difficult to determine when information is made available on a particular website.

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Further, applicant submits herewith a declaration under 37 CFR 1.131 showing actual reduction to practice of the apparatus embodied by the claims as recited above before the reference "the cloth website" bearing a print date of 5/6/2003. As such, "the cloth website" is removed as an available reference in making the above 103(a) rejection of claims 1, 41, 42, 45 and 51 over EP 1 362 544 in view of "the cloth website".

With respect to claims 41-44, as recited above, each are patentable under 35 USC 103 because they each add additional features to independent claim 1 as amended and recited above, and are thus submitted to be a-fortiori, patentable.

With respect to claim 52, as recited above, is patentable under 35 USC 103 because they each add additional features to independent claim 51 as amended and recited above, and are thus submitted to be a-fortiori, patentable.

6. The rejection of claims 1, 41-42, 48, 51 and 52 under 35 USC 103(a) as being unpatentable over Bolton (USPN 6,131,233) in view of Dugan (USPN 6,465,095) is respectfully traversed and reconsideration thereof is respectfully requested.

Bolton discloses a mop comprised of hollow tube-like members made of a substantially rectangular flexible sheet member which is connected (typically by stitching, sewing or the like) along its longitudinal edges to form the respective tubular member. The rectangular flexible sheet member is of a textile material of microfibrinous yarn. The microfibrinous yarn may be split, but no specific configuration of the split microfibrinous yarn is disclosed. It is clear the present invention does not encompass textile sheet material as disclosed by Bolton, but rather is directed to separate and non-interwoven cords each being formed of microfiber filaments being twisted together into the respective cord. Bolton only discloses the use of microfiber used in a textile sheet form in the making of a mop.

Dugan, is directed towards the making of bicomponent fibers for use in the manufacture of textile fabrics. (column 15, lines 30-67). Dugan does not disclose the use of the bicomponent fibers in any other application other than making textile fabrics. Further, Dugan does not disclose the particular split fiber arrangement of the present

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invention to include a core member, a plurality of projections emanating from the core member, and a wedge-shaped insert disposed between every other projection. The examiner makes reference to Figure 1c and suggests the particular arrangement of the split configuration is shown thereby. However, the fibers of Figure 1c include polymeric segments arranged as a matrix 8 and multiple segments 6 partially encased or enclosed in the matrix 8. The split configuration of the fibers of the present invention do not include segments 6 which are partially encased or enclosed by a matrix 8. It is clear, the wedge shaped inserts 106 of the present invention are not enclosed or encased by a matrix as disclosed by Dugan. The wedge shaped inserts 106 are positioned between separate projections 104 which emanate from a core member 102 such that spaces are present between the wedge shaped inserts and the projections.

As such, claim 1 as amended and recited above is patentable under 35 USC 103(a) over Bolton in view of Dugan because it recites the following claim limitations which are not disclosed or made obvious by Bolton in view of Dugan:

a mop head coupling element;

at least two cords, said at least two cords being separate and non-interwoven, each of said at least two cords comprising a plurality filaments twisted together into a bundle, each of a said plurality of filaments are of a denier from about 0.02 to about 0.99; each of said plurality of filaments are split and comprise a core member, a plurality of projections emanating from the core member and a wedge-shaped insert disposed between every other projection; and

wherein each of said at least two cords is secured to said mop head coupling element.

Claims 41-44, as recited above, each are patentable under 35 USC 103 because they each add additional features to independent claim 1 as amended and recited above, and are thus submitted to be a-fortiori, patentable.

Claim 48 as amended and recited above is patentable under 35 USC 103(a) over Bolton in view of Dugan because it recites the following claim limitations which are not disclosed or made obvious by Bolton in view of Dugan:



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a mop head coupling element;  
at least two cords, said at least two cords being separate and not woven together,  
each of said at least two cords comprising a plurality of filaments twisted together into a  
bundle forming said cord, each of a said plurality filaments are of a denier from about  
0.02 to about 0.99 and being of a filament that is spun extruded from a precursor material  
comprising a combination from about 70 percent to about 90 percent polyester and about  
10 percent to about 30 percent nylon, acid treated to comprise a core member, a plurality  
of projections emanating from the core member, and a wedge-shaped insert disposed  
between every other projection; and  
wherein each of said at least two cords includes an end that is secured to said  
surface.

Claims 49 and 50, as recited above, each are patentable under 35 USC 103  
because they each add additional features to independent claim 48 as amended and  
recited above, and are thus submitted to be a-fortiori, patentable.

Claim 51 as amended and recited above is patentable under 35 USC 103(a) over  
Bolton in view of Dugan because it recites the following claim limitations which are not  
disclosed or made obvious by Bolton in view of Dugan:

a surface;  
at least two cords, said at least two cords being separate and not woven together,  
each of said at least two cords comprising a plurality of filaments twisted together into a  
bundle forming said cord, each of a said plurality filaments are of a denier from about  
0.02 to about 0.99 and being of a filament that is spun extruded from a precursor material  
comprising a combination from about 70 percent to about 90 percent polyester and about  
10 percent to about 30 percent nylon, acid treated to comprise a core member, a plurality  
of projections emanating from the core member, and a wedge-shaped insert disposed  
between every other projection; and  
wherein each of said at least two cords includes an end that is secured to said  
surface.



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Claims 52-54, as recited above, each are patentable under 35 USC 103 because they each add additional features to independent claim 51 as amended and recited above, and are thus submitted to be a-fortiori, patentable.

7. The rejections of claims 46, 49, and 54 under 35 USC 103(a) as being unpatentable over EP 1 362 544 in view of <http://www.the-cloth.com/ourmicro.shtml> (herein referred to as "the cloth website") and further in view of Wooley (USPN 6,131,731) is respectfully traversed and reconsideration thereof is respectfully requested.

Claim 46, as recited above, is patentable under 35 USC 103 because it each adds additional features to independent claim 1 as amended and recited above, and is thus submitted to be a-fortiori, patentable.

Claim 49, as recited above, is patentable under 35 USC 103 because it each adds additional features to independent claim 48 as amended and recited above, and is thus submitted to be a-fortiori, patentable.

Claim 54, as recited above, is patentable under 35 USC 103 because it each adds additional features to independent claim 51 as amended and recited above, and is thus submitted to be a-fortiori, patentable.

8. Applicant respectfully notes negative limitations are permitted see MPEP 2173.05(i).

9. Applicant respectfully notes product-by-process claim limitations are permitted see MPEP 2173.05(p).

In view of the above, it is respectfully submitted that:

Claims 1-54, recite distinctions that are of patentable merit under 35 USC 103(a) for the independent claims and thus for each dependent claim as well. Claims 1-54 are in

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condition for allowance. Reconsideration and withdrawal of the rejections are requested.

Allowance of claims 1-54 at an early date is solicited.

The Examiner is hereby requested to telephone the undersigned agent of record at 727-345-1450 if such would further or expedite the prosecution of the instant application.

Respectfully submitted,

/Stephen Lewellyn/

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